

REMARKS

Claims 1-15 are pending in this application. Claims 1, 3, 6 and 13 have been amended. No new matter has been introduced.

Claims 1-3, 6-9, 13 and 15 stand rejected under 35 U.S.C. §102(b) as being anticipated by Anctil et al. (U.S. Patent No. 5,922,003) ("Anctil"). This rejection is respectfully traversed.

The claimed invention relates to an apparatus and method for abrading tissue. As such, amended independent claim 1 recites a "bearing tube having a distal end and a proximal end," "a suction port formed distally in a sidewall of the bearing tube, the suction port being spaced from the distal end of the bearing tube" and "an inner tube disposed within the bearing tube and having a distal suction opening." Amended independent claim 1 also recites that the distal opening is "located proximal of the suction port in the sidewall of the bearing tube." Amended independent claim 1 further recites "a solid transition region extending distally from the inner tube and disposed distal to the distal suction opening" and "an abrading element disposed distally and supported on the solid transition region."

Amended independent claim 13 recites a "method of abrading tissue" by *inter alia* "proximating tissue to be abraded with an abrading instrument, the abrading instrument including: a bearing tube having a distal end and a proximal end, and a suction port formed distally in a sidewall of the bearing tube, the suction port being spaced from the distal end of the bearing tube." Amended independent claim 13 also recites "an inner tube disposed within the bearing tube and having a distal suction opening, the distal opening being located proximal to the suction port in the sidewall of the bearing tube." Amended independent claim 13 further recites "a solid transition

region extending distally from the inner tube and disposed distal to the distal suction opening," "an abrading element disposed distally on the solid transition region." Amended independent claim 13 additionally recites "abrading the tissue with the abrading element" and "aspirating debris generating by abrading the tissue through the suction port and into the inner tube through the distal suction opening."

Anctil relates to "an angled rotary tissue cutting instrument including an outer blade assembly, having a rigid tubular member with proximal and distal portions connected by a bend, and an inner blade assembly rotatably disposed within the outer blade assembly." (Abstract). Anctil teaches that the instrument includes "a tubular drive shaft at a proximal end, a cutting tip at a distal end, and a flexible coupling disposed between the drive shaft and the cutting tip." (Abstract).

Anctil does not anticipate the subject matter of claims 1-3, 6-9, 13 and 15. Anctil fails to disclose, teach or suggest all limitations of amended independent claims 1 and 13. Anctil is silent about "a suction port formed distally in a sidewall of the bearing tube, the suction port being spaced from the distal end of the bearing tube" and "an inner tube disposed within the bearing tube and having a distal suction opening . . . located proximal of the suction port in the sidewall of the bearing tube," as claims 1 and 13 recite. In Anctil, opening 750 (which would arguably correspond to the "distal suction opening" of the inner tube of the claimed invention) is part of the bur 738, and not part of the inner tube, as in the claimed invention. For at least these reasons, Anctil fails to anticipate the subject matter of claims 1-3, 6-9, 13 and 15, and withdrawal of the rejection of these claims is respectfully requested.

Claims 1-3, 6-9, 11 and 13-15 stand rejected under 35 U.S.C. §102(b) as being anticipated by Veca et al. (U.S. Patent No. 6,053,923) ("Veca"). This rejection is respectfully traversed.

Veca relates to a "method and apparatus for abrading tissue during arthroscopic surgery." (Abstract). Veca teaches that the apparatus "includes a first rotatable tube assembly and a second tube assembly" and that the first rotatable tube assembly "has a first proximal end and a first distal end with an abrading head at the first distal end." (Abstract). Veca also teaches that the second tube assembly "has a second proximal end and a second distal end with an external aspiration port passing through a sidewall of the second tube assembly."

Veca does not anticipate the subject matter of claims 1-3, 6-9, 11 and 13-15. Veca fails to disclose, teach or suggest "a suction port formed distally in a sidewall of the bearing tube, the suction port being spaced from the distal end of the bearing tube," as amended independent claims 1 and 13 recite. In Veca, port 132, which would arguably correspond to the "suction port" of the claimed invention, is not "formed distally in a sidewall of the bearing tube" and "spaced from the distal end of the bearing tube," as in the claimed invention. In addition, suction port 96 of Veca, which would arguably correspond to the "distal suction opening" of the inner tube of the claimed invention, is not "located proximal of the suction port in the sidewall of the bearing tube," as in the claimed invention. Suction port 96 of Veca is aligned with the external suction port 128, and not "located proximal" to it, as in the claimed invention. For at least these reasons, Veca fails to anticipate the subject matter of claims 1-3, 6-9, 11 and 13-15, and withdrawal of the rejection of these claims is respectfully requested.

Claims 1-3, 6-9, 11 and 13-15 stand rejected under 35 U.S.C. §102(b) as being anticipated by, or as being unpatentable over, Johnson et al. (U.S. Patent No. 4,842,578) ("Johnson"). This rejection is respectfully traversed.

Johnson relates to a surgical instrument that includes "the combination of a distally, side-supported inner drive shaft carrying on its end an abrading element, a

fixed outer tubular member surrounding the inner shaft and providing at a bearing region the distal support for the inner shaft.” (Abstract). Johnson teaches that a distal extension of the tubular supporting member “provides a sheath for a portion of the abrading element and a vacuum passage communicating proximally from the region of the abrading element, past the bearing region, to a proximal vacuum connection.” (Abstract).

Johnson does not anticipate the subject matter of claims 1-3, 6-9, 11 and 13-15. Johnson fails to disclose, teach or suggest all limitations of amended independent claims 1 and 13. Johnson does not disclose, teach or suggest “a suction port formed distally in a sidewall of the bearing tube” and “spaced from the distal end of the bearing tube,” much less “an inner tube disposed within the bearing tube and having a distal suction opening, the distal suction opening being located proximal of the suction port in the sidewall of the bearing tube,” as amended independent claims 1 and 13 recite. Johnson is also silent about “a solid transition region extending distally from the inner tube and disposed distal to the distal suction opening,” as in the claimed invention. For at least these reasons, Johnson fails to anticipate the subject matter of claims 1-3, 6-9, 11 and 13-15. As Johnson fails to disclose all limitations of claims 1-3, 6-9, 11 and 13-15, the Office Action fails to establish a *prima facie* case of obviousness and, thus, the subject matter of these claims would also not have been obvious over Johnson. Withdrawal of the rejection of claims 1-3, 6-9, 11 and 13-15 is respectfully requested.

Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Veca or Anctil in view of Dion (U.S. Patent No. 5,913,867). This rejection is respectfully traversed.

Claim 10 depends on dependent claim 9 and independent claim 1 and recites that the drive assembly “includes suction ports extending radially, the suction ports connecting to a lumen of the inner tube.”

Dion relates to a surgical instrument that “comprises an inner tube which rotates within an outer tube and carries a surgical tool that includes a burr for cutting tissue exposed to the burr through an opening in the outer tube.” (Abstract). According to Dion, “[T]he instrument includes several features which enhance the efficiency at which tissue fragments severed by the burr are aspirated through the inner tube, and which enable the burr to effectively cut relatively soft tissue as well as harder tissue such as bone.”

The subject matter of claim 10 would not have been obvious over Veca or Anctil in view of Dion. Specifically, the Office Action fails to establish a *prima facie* case of obviousness. Courts have generally recognized that a showing of a *prima facie* case of obviousness necessitates three requirements: (i) some suggestion or motivation, either in the references themselves or in the knowledge of a person of ordinary skill in the art, to modify the reference or combine the reference teachings; (ii) a reasonable expectation of success; and (iii) the prior art references must teach or suggest all claim limitations. See e.g., In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998); Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573 (Fed. Cir. 1996).

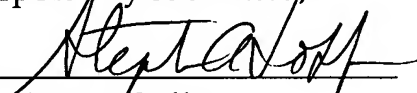
Veca, Anctil and Dion, whether considered alone or in combination, do not disclose, teach or suggest all limitations of amended independent claims 1 and 13. As noted above, Veca fails to disclose, teach or suggest “a suction port formed distally in a sidewall of the bearing tube, the suction port being spaced from the distal end of the bearing tube,” as in the claimed invention. Anctil also fails to disclose, teach or suggest

Veca, Anctil and Dion, whether considered alone or in combination, do not disclose, teach or suggest all limitations of amended independent claims 1 and 13. As noted above, Veca fails to disclose, teach or suggest "a suction port formed distally in a sidewall of the bearing tube, the suction port being spaced from the distal end of the bearing tube," as in the claimed invention. Anctil also fails to disclose, teach or suggest "a suction port formed distally in a sidewall of the bearing tube, the suction port being spaced from the distal end of the bearing tube" and "an inner tube disposed within the bearing tube and having a distal suction opening, the distal suction opening being located proximal of the suction port in the sidewall of the bearing tube," as amended independent claims 1 and 13 recite. Dion fails to disclose any of the limitations of the claimed invention. For at least these reasons, the Office Action fails to establish a *prima facie* case of obviousness, and withdrawal of the rejection of claim 10 is respectfully requested.

Allowance of all pending claims is solicited.

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